

Employee Profit Sharing: Consequences and Moderators

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Résumé de l'article

Il existe en général suffisamment de preuve à l'effet que le partage des profits avec les employés se traduit par une amélioration des résultats d'une entreprise. Cependant, on connaît très peu les conditions de cette relation, de même que les mécanismes qui la permettent. En s'appuyant sur la théorie et sur une recherche empirique précédente, cette étude révèle l'impact et les facteurs modérateurs des régimes de partage des profits et se sert des données tirées de 108 entreprises canadiennes qui ont un tel régime pour procéder à une vérification d'ordre empirique.

Sept avenues d'ordre théorique reliant ces régimes à diverses conséquences au plan organisationnel sont répertoriées. Une première avenue laisse croire que le partage des profits peut accroître l'effort d'un salarié en accentuant les liens entre la rémunération et la performance. Une deuxième suggère que le partage des profits rend l'enveloppe de la rémunération beaucoup plus attrayante, ce qui peut faciliter à la fois le recrutement et la réduction du roulement de l'effectif. Une troisième soutient qu'un tel régime favorise une perception de la rémunération sous un aspect plus équitable; en ce faisant, on évite ainsi les problèmes associés à l'inéquité de la rémunération, tels que l'absentéisme, le roulement et une performance diminuée de la part des salariés. Une quatrième avenue suggère que le partage des profits engendre une plus grande identification à l'organisation, ce qui se traduit par des comportements qui indiquent une sorte de « citoyenneté organisationnelle ». Une cinquième prétend qu'un tel régime peut mener à un effort plus grand de collaboration entre la direction et ses salariés et entre les salariés eux-mêmes. Une sixième soutient qu'une réduction des conflits et une coopération associées à un accroissement de la satisfaction à l'endroit de la rémunération devraient se traduire par une augmentation de la satisfaction au travail. Cette dernière aurait des effets bénéfiques sur le roulement, l'absentéisme et le nombre de griefs. Enfin, une dernière avenue nous incite à penser que le partage des profits peut accroître l'intérêt que les salariés démontrent à l'endroit des résultats d'une entreprise, tout en les invitant à communiquer à la direction leurs idées sur des économies possibles.

Cependant, on soutient également qu'un certain nombre de facteurs peuvent freiner l'apparition des effets que nous venons d'identifier. Ces facteurs modérateurs sont de l'ordre des caractéristiques d'une entreprise, des caractéristiques des régimes de partage des profits eux-mêmes et de la philosophie dominante de la direction. Afin de vérifier dans quelle mesure ces conséquences se produisent, de même que la présence de facteurs qui tempèrent leur apparition, on a effectué des entrevues avec les membres de la haute-direction de 108 entreprises canadiennes qui utilisent un régime de partage des profits. Au cours de ces entrevues, on a recueilli de l'information sur les caractéristiques des entreprises, les régimes de partage de profits et la nature de la philosophie managériale. Également, on a obtenu des données sur la perception que se font les présidents-directeurs généraux des effets des régimes sur les treize aspects suivants: l'intérêt des salariés à l'endroit de la performance de l'entreprise, leur effort et leur motivation, leur loyauté, le roulement, l'absentéisme, la satisfaction au travail, la collaboration, le nombre de griefs, les relations du travail, la facilité ou non à recruter des personnes, la profitabilité de l'entreprise, la valeur de l'action en bourse et, enfin, l'entreprise en général.

Dans l'ensemble, on constate que ces présidents et directeurs généraux perçoivent le partage des profits comme ayant un effet favorable sur chacun des aspects énumérés plus haut, sauf le taux de griefs et la valeur des actions. La moitié des répondants ne voient aucun impact sur ces derniers aspects et moins que la moitié y voient un effet positif. Cependant, on découvre que trois facteurs modèrent fortement l'émergence de ces conséquences. En ligne avec les attentes sur le sujet, les régimes connaissent moins de succès dans les entreprises dont la direction partage une philosophie managériale conventionnelle ou classique, dont l'un des ingrédients consiste à croire que les salariés ne sont motivés que par l'argent. Toujours en ligne avec les attentes, ces régimes connaissent un plus grand succès dans les entreprises où l'on diffuse une complète information sur la nature du régime en vigueur et les circonstances d'ordre financier qui affectent l'entreprise. Enfin, on considère que ces régimes connaissent plus de succès dans les entreprises où les bonus provenant du partage sont calculés en se basant sur une mesure de la performance individuelle des salariés.

Employee Profit Sharing

Consequences and Moderators

RICHARD J. LONG

Although there is substantial evidence that, on average, employee profit sharing improves company performance, little is known about the conditions under which it does so or the mechanisms through which it operates. Based on theory and previous empirical research, this study identifies possible consequences and moderators of profit sharing, and then utilizes a data set from 108 Canadian profit sharing-firms to empirically examine them. Virtually all of the predicted consequences emerged, although to varying degrees. Three main factors moderated their emergence. Results were significantly more favourable in firms that had a high involvement managerial philosophy, that communicated extensively about profit sharing, and that allocated the profit-sharing bonus according to measures of individual employee performance.

Employee profit sharing has experienced a dramatic increase in popularity in Canada in recent years (Long 1992; Chaykowski and Lewis 1995; Wagar and Long 1995). However, while advocates contend that employee profit sharing can lead to a variety of desirable consequences, very little is known about the extent to which these different consequences actually materialize, or about factors that may affect their emergence.

The one exception to this dearth of evidence is in regard to productivity, where there is an impressive array of evidence that, on average, profit sharing is associated with higher productivity. For example, based on their

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review of more than twenty econometric studies, Weitzman and Kruse (1990) concluded that profit-sharing firms were significantly more productive (a median of 4.4%) than firms without profit sharing. A subsequent meta-analysis of empirical studies (Doucouliagos 1995) revealed a similar result. However, virtually all of these studies were cross sectional, and thus do not indicate causal directionality.

To establish causal directionality, Kruse (1993) conducted a major study of U.S. firms before and after they had introduced profit sharing, and compared these results to a matched sample of non profit-sharing firms. He found profit sharing increased productivity by an average of 4.3%, remarkably similar to the median result found by Weitzman and Kruse (1990).¹ Consistent with this, Bhargava (1994) found a significant positive relationship between profit sharing and company profitability in his longitudinal study of a large sample of British firms.

However, these studies do not tell us much about the mechanisms through which profit sharing produces these productivity gains. Although studies which examine other predicted consequences of profit sharing might provide some clues, only three such studies could be located. Brown, Fakhfakh, and Sessions (1999) found that profit sharing lowered absenteeism in French firms, while Wilson and Peel (1991) concluded that profit sharing had significantly lowered absenteeism and employee turnover in a sample of British firms. Kraft (1991) found that profit sharing lowered the number of employee dismissals in German firms.

In order to understand why profit sharing increases productivity, it is necessary to examine the impact of profit sharing on a variety of consequences that may contribute to productivity. However, an equally pressing need is for studies that identify variables that moderate the effects of profit sharing, since profit-sharing plans vary greatly in the success they achieve. For example, Kruse (1993) found that 25% to 33% of firms adopting profit-sharing plans experienced no productivity increase whatsoever. His study is the only one to date that has systematically examined the role of various moderators in affecting profit-sharing consequences.

The purpose of this study is to address these two needs. To examine the effects of profit sharing, the chief executive officers (CEOs) of 108 Canadian companies with profit sharing were interviewed by telephone, and asked to rate the impact of profit sharing on thirteen potential consequences. At the same time, data on numerous company and profit-sharing

1. Interestingly, the only available Canadian study examining profit sharing and productivity (Magnan, St-Onge, and Lalande 1997) found that adoption of profit sharing by Quebec credit unions had a positive impact on several financial indicators (total assets, members' equity, and loan losses), but not on productivity or return on capital.

plan characteristics were also collected, which makes it possible to examine factors that may moderate the effects of profit sharing.

Although this methodology is difficult and costly to employ, the resulting data set has some unique advantages. First, it incorporates causal directionality, by specifically soliciting the perceived effects of profit sharing. Second, chief executive officers are in a unique position within their firms to understand the possible consequences of profit sharing, because of their intimate knowledge of various indicators of company performance. Third, CEOs were generally highly knowledgeable about the characteristics of their profit-sharing systems, and various other company characteristics, and had the authority to release this information. Fourth, by dealing directly with CEOs, it was possible to obtain some measure of the prevailing managerial philosophy at each firm, which is hypothesized to play a key role in determining the consequences of profit sharing.

Of course, it might be argued that CEOs are not good judges of the effects of profit sharing, and that their perceptions may be inaccurate. This is indeed possible, and the results of this study need to be put into the context of other studies before firm conclusions can be drawn. But, as a practical matter, it should be noted that the perceptions of CEOs, accurate or not, will have a major impact on actual company behaviour, so understanding their perceptions is in itself important.

POSSIBLE CONSEQUENCES OF PROFIT SHARING

In order to identify potential consequences of employee profit sharing, a number of possible theoretical paths from profit sharing to improved company performance will be traced. Although the focus is on nonmanagerial employees, there are no obvious reasons why these paths should not apply to most managerial employees as well.

Path 1: Increased Individual Effort. The first path occurs through the effect of profit sharing on perceived reward contingencies. Adding profit sharing to base pay creates an additional performance-contingent incentive to motivate higher worker job effort, in line with the expectancy theory of motivation (Vroom 1964; Lawler 1973). The essence of this is simple: if a worker improves his or her performance, and this increases company profits, he or she can expect to receive a portion of the profits so generated. If many employees perceive this linkage and act upon it, this may significantly increase firm productivity.

However, many economists are skeptical of this path, citing the "1/N" or "free-rider" problem (Olson 1971; Jensen and Meckling 1976). If an individual increases effort and productivity, that individual receives only

a small portion of that productivity gain, having to share it with all others included in the profit-sharing system ("N"). Even if an individual does not change his or her effort, he or she can still gain from the increased effort of others, and thus become a "free rider." Of course, if everyone thinks this way, there will be no change in employee behaviour, and therefore no productivity gain through this path. In fact, there will be a negative impact on calculated labour productivity, if the cost of the profit-sharing bonus is added to labour costs.

Interestingly, the "free rider" problem in economic theory has its counterpart in social-psychological theory, known as "social loafing." Social loafing "refers to the reduced performance of individuals who act as part of a group rather than alone" (Earley 1989: 565), and is most evident when employees are rewarded collectively and individual output is not identified. Thus, two different theoretical perspectives converge to predict no productivity gain from profit sharing, at least through the "individual effort" path.

However, proponents of profit sharing contend that profit-sharing systems can put into motion a set of dynamics that will discourage "free riding" and "loafing." For example, Fitzroy and Kraft (1986) argue that if employees as a group understand that their economic well-being is maximized under conditions where free riding and loafing are minimized, then group norms may develop that value high productivity, and workers themselves will monitor adherence to these norms. In other words, even if individual employees do not believe that increases in their personal effort will yield them significant personal gains through profit sharing, they may recognize that if *everyone* increases their efforts, there may well be significant individual gains.

Path 2: Increased Compensation Attractiveness. Even if profit sharing does not cause individual employees to increase their job effort, there are numerous other possible paths to improved company performance. One is simply extrinsic. If profit sharing results in higher net earnings for employees, as Kruse (1993) has found in his review of the evidence, then profit sharing may help to create a more attractive compensation package than would otherwise be offered. Many firms also use their profit-sharing systems to create a pension plan for employees. All of this may reduce turnover rates, and make it easier to recruit higher calibre employees.

Path 3: Increased Reward Equity. Profit sharing may also increase perceptions of reward equity. Where firms are highly profitable but are loath to share this bounty with their employees, this may lead to perceived inequity and reward dissatisfaction—with all the negative consequences that this may engender, including absenteeism, reduced performance, or

turnover (Long 1998). Avoidance of these problems could make an important difference in company performance.

Path 4: Increased Organizational Identification. Another possible path to organizational performance is through organizational identification (Welbourne and Cable 1995). Organizational identification can be viewed as three interrelated concepts: perceptions of shared characteristics, a feeling of solidarity with the organization, and loyalty to the organization (Rotondi 1975). Perceptions of shared characteristics occurs when employees perceive shared interests with those higher in the organization, and profit sharing should promote this. Organizational identification could be expected to enhance organizational citizenship behaviour (Organ 1990) — the extent to which employees are inclined to go above and beyond the call of duty in performing their organizational roles. Organizational identification should also serve to promote affective commitment — a psychological attachment to the organization—which has been shown to reduce turnover, absenteeism, grievances and the like (Tett and Meyer 1993).

Path 5: Increased Cooperation. To the extent that everyone identifies with the organization and its goals, there should be greater cooperation between employees and management, and among employees, as well as reduced conflict and less adversarial union-management relationships (Fitzroy and Kraft 1986). This could help to remove barriers to employee performance, allowing performance to increase even without any additional employee effort.

Path 6: Increased Job Satisfaction. Increased cooperation and reduced conflict may not only remove barriers to productivity, but may also create a more congenial workplace. Along with increased reward satisfaction (paths 2 and 3), these changes may contribute to higher job satisfaction, which may, in turn, lead to reduced turnover, absenteeism, and grievances (Tett and Meyer 1993).

Path 7: Increased Interest in Company Performance. If profit sharing helps to make employees more knowledgeable about and interested in the performance of the company, this may stimulate employees to suggest money-saving ideas or to share information which will contribute to higher quality organizational decision making (Kruse 1993). This could engender major productivity gains, but only if the company is structured to solicit and utilize effectively employee input in decision making.

POSSIBLE MODERATORS OF PROFIT SHARING

The extent to which these potential benefits of profit sharing will actually materialize is likely dependent on a variety of circumstances,

including characteristics of the company, characteristics of the profit-sharing plan, and the managerial philosophy practised by the firm.

Company Characteristics

It has long been argued that profit sharing should be more effective in smaller firms, because the 1/N problem will not be as severe. However, the empirical evidence is not consistent on this issue. While Bradley and Smith (1991) found profit sharing more effective in small firms in their U.S. study, three British studies (Wadhwani and Wall 1990; Cable and Wilson 1989, 1990) did not. Jones and Pliskin (1991) found that profit sharing was more effective in small firms in one British sample, but not in another. Kruse (1993) found profit sharing to be most effective in U.S. firms that were either very small or very large. If firm size does not in fact affect the consequences of profit sharing, one implication is that the individual effort path may not be the main route through which profit sharing affects firm performance.

Profit sharing may be more effective in nonunion firms, where mutual monitoring may be more acceptable than in union firms (Jones, Kato, and Pliskin 1995). In fact, Cooke (1994) found profit/gain sharing to increase productivity in nonunion U.S. companies by 18%, and by only 6.5% in unionized firms (after controlling for higher pay levels in unionized firms). Profit sharing may also have more effect in firms that employ professional employees, because the retention and motivation of these employees might have more impact on organizational performance.

Industrial sector may also play a role in profit sharing success. Sectors that are more labour intensive, such as the service sector, may experience a greater benefit from profit sharing, since labour costs are such a large component of total costs. However, it might be argued that employee behaviour is more crucial to success in capital intensive sectors (such as in petroleum refining), since poor employee performance can have dramatic consequences. Finally, the impact of profit sharing may be lower in older firms, if they are more traditional in their management styles. Although there is no direct evidence on this point, Betcherman et al. (1994) found in their large-scale Canadian study that firms in "older" industries, such as wood products, were more traditional in their management styles than firms in "newer" industries, such as electronics.

Plan Characteristics

Numerous characteristics of profit-sharing plans may have an impact on their consequences. One such characteristic may be the form of the bonus payout. It may be in cash (sometimes known as a "current distribution plan,"

since payouts take place at least annually), it may be deferred (placed in a pension trust fund), or it may be a combination of the two. Motivation theory suggests that a cash plan would be more motivating since there is a closer and more tangible linkage between effort and reward. Florkowski (1987) and Kruse (1993) in fact found higher productivity for cash plans.

Plans in which the total amount of the profit-sharing bonus pool is determined by a fixed pre-determined formula (in contrast to plans where the bonus amount is established at the discretion of management each year) should also be more motivating, since there is greater instrumentality or assurance that increased profits will lead to increased employee rewards. Interestingly, however, Kruse's (1993) results indicated that plans with fixed pre-specified profit proportions were actually *less* effective than discretionary plans.

Expectancy theory would also predict that plans where the profit-sharing bonus is higher (as a proportion of profits) will be more effective, since this will increase the valence of the expected rewards. In fact, Kruse (1993) did find that the productivity effects of profit sharing increased significantly with the size of the bonus.

A key plan feature is employee eligibility. Some profit-sharing plans restrict eligibility to a small group of employees, while others include everybody. It would be expected that plans with broader eligibility would have more impact (Florkowski 1987). First, the more people included, the greater the opportunity for impact on firm performance. Second, if many employees are excluded, this will foster division among employees, rather than the teamwork and cooperation that proponents see as hallmarks of profit sharing.

Another plan feature is the basis for allocating the profit-sharing bonus pool across eligible employees. Traditionally, it has been allocated according to salary, with higher-paid employees receiving a larger portion of the bonus. In some cases, the allocation is done according to seniority, with the bonus increasing with each year of service. Some firms use a combination of salary and seniority, while others simply allocate the bonus equally to eligible employees. Finally, in recent years, many firms have started to tie the individual payout to some measure of individual performance. With this approach, overall profitability determines the total amount of the profit-sharing bonus pool, and individual performance determines how much of the pool each employee actually receives.

It is not clear how the different bonus allocation approaches might affect profit-sharing results. Perhaps an equal allocation system would cause greater cohesion and cooperation, because everyone would be benefiting equally from improved profitability, but high performers may perceive this

as inequitable. Systems based on seniority might reduce turnover of high seniority (long service) employees, but unless these employees are perceived to contribute more to profitability than employees with lower seniority, this may cause perceptions of pay inequity. A salary based system may be seen by the majority of employees as the least equitable of all, since it appears to reflect a system “where the rich get richer,” especially if the underlying salary structure is not perceived as equitable.

A performance-based allocation may be seen as the most equitable, as long as the method for evaluating individual performance is seen as fair. It may also be the most motivating, since an employee who contributes to profitability benefits twice—by increasing the total pool of profits available, and then by receiving a greater share of them. This system also tackles the “free rider” and “social loafing” problems head on, since free riders will not participate in the profits. But its success hinges on having an accurate measure of individual performance. If the performance measurement process is perceived as being unreliable or unfair, then this may cause dissatisfaction with the profit-sharing system, and wipe out any supposed motivational advantages.

Another key feature is communication. If profit sharing is not effectively communicated to — or not well understood by — employees, then its impact on attitudes and behaviour will be minimal (Lawler 1992; Tyson 1996). The financial results of the company and possible ways in which employees may be able to enhance productivity also need to be communicated if the plan is to maximize motivation and foster useful employee input in decision making. Surprisingly, however, Kruse (1993) found that increased company information did not increase productivity, with the exception of information about competitor performance.

Several other aspects may also be relevant. Many experts (Cooper, Dyck, and Frohlich 1992; Tyson 1996) argue that consultation with employees during profit-sharing design will improve effectiveness, by helping to produce a system that addresses employee needs, by increasing trust in the plan, and by helping to communicate the plan. Use of a profit-sharing consultant in plan design may also improve plan success. Mature plans (that have been in place longer) may have more impact than newly introduced plans.

Managerial Philosophy

The managerial philosophy of top management may also affect profit-sharing outcomes. Miles (1975) has argued that three main schools of managerial thought can be identified — the classical school, the human relations school, and what has become known as the “high-involvement”

school (Lawler 1992). The *classical manager* assumes that people are motivated only by economic self-interest, and will do as little as possible while still maximizing their economic gain. These managers tend to practice a traditional, tightly controlled management approach, with jobs highly fragmented in order to facilitate employee supervision and replacement.

The *human relations manager* also assumes that work is inherently distasteful, but believes that employees can best be induced to work by the social rewards that the organization can provide. They will still practice a control-oriented approach to management, with fragmented jobs, but control will be exercised through positive group norms, flowing from an employee-oriented, paternalistic approach to management. In contrast, the *high-involvement manager* assumes that employees can be self-motivated if their work is challenging and interesting, if they are given sufficient autonomy and organizational support to perform the job as they see fit, and if employee goals are integrated with those of the organization (Lawler 1992).

According to Miles (1975), these three managerial philosophies can create three distinct organizational types. Consistent with this argument, a large scale empirical study by Betcherman et al. (1994) found that Canadian organizations can indeed be classified into three major types — industrial, salaried, and high performance — and these are analogous to the classical, human relations, and high involvement organizational types identified by Miles (1975).

Overall, profit sharing should be most attractive to and most congruent with “high-involvement” organizations, where high levels of cooperation, citizenship behaviour, and self-control are highly valued. Profit sharing can help foster internalization of company goals, and provide a mechanism for keeping employees informed about the business. These firms will have a culture of employee participation in decision making, providing a channel for incorporating employee-initiated suggestions and improvements into the organization (Long 1998).

Profit sharing may be useful in “human relations” organizations to the extent that it serves as an additional benefit to cement loyalty to the firm, and to the extent that it reinforces positive work norms. However, the impact of profit sharing is not likely to be dramatic, since the participative culture necessary to maximize the contribution of profit sharing is not generally in place.

But in traditional or “classical” firms, profit sharing may yield few benefits. Profit sharing is not philosophically compatible with a system in which managers and employees are seen as adversaries. In a situation of low trust, profit sharing may simply become another source of conflict, as

employees believe that management will somehow attempt to cheat them out of their rightful share of the profits, or will attempt to use profit sharing to reduce other compensation. Reluctance of management to release information will foster mistrust, and employee input will likely be neither sought by management nor offered by employees. It is in these firms that the free rider problem is most likely to emerge since positive group norms are unlikely to exist.

Other commentators (e.g., Weitzman and Kruse 1990; Jones and Pliskin 1991) have also argued that firms in which labour and management cooperate are more likely to realize productivity gains from profit sharing. At least two studies bear on this hypothesis. In their British study, Cable and Fitzroy (1980) found positive results for profit sharing only in "high participation" organizations. In his U.S. study, Kim (1998) found profit sharing had favourable effects on profitability only in firms with employee involvement programs.

METHOD

Data Collection and Sample

The sample for this study consists of 108 companies operating in Canada which have broad-based profit sharing. These firms were identified as part of a larger study to determine the incidence of employee profit sharing and share ownership in Canada (Long 1992, 1997). This sample was designed to be representative of Canadian business and included a mix of industrial sectors and firm sizes.

After receiving a letter explaining the purpose of the study, CEOs were interviewed by telephone, with the use of a structured interview format. After solicitation of general information about the company, respondents were asked whether or not their company had profit sharing. If it did, they were questioned about the nature of their plans and their perceived consequences.

All interviews were conducted between May 1989 and June 1990, and were successfully conducted at 626 companies, a response rate of 42.2 percent. Considering that over 81 percent of the respondents were indeed CEOs, this was regarded as a very satisfactory response rate. Interestingly, of the 108 firms that had adopted profit sharing, the majority of the plans (58.5%) had actually been introduced by the respondent.

The majority of profit-sharing firms (60%) were from the service sector (including construction), while the remainder were from manufacturing (33%) or the primary sector (7%). Most (76%) were private corporations, and the remainder consisted mainly of publicly traded corporations. Just

over one third (37%) were unionized. In all, these 108 firms employed over 132,000 persons, ranging from 14 to 22,000 employees. The median number of employees was 200. Gross sales ranged from \$650,000 to \$5.2 billion annually, and the median was \$27 million.

Variable Measures

Profit Sharing. The definition of profit sharing used in this study was stringent, since previous research suggests that up to half of firms that claim to have profit sharing do not in fact have plans that would meet recognized criteria (Conte 1992). The following criteria were used. First, only firms with broad-based profit sharing were included. For example, firms that extended profit sharing only to managerial employees were excluded. Plans which limited participation to designated employees were included only if they included at least some non-managerial employees. To be included, a firm must have had a formal program in which payments are made to a wide cross-section of employees, on a regular basis, based on the overall profitability of the firm.

Consequences of Profit Sharing. In order to ascertain CEO perceptions of the consequences of profit sharing, two procedures were used. First, CEOs were simply asked, in an open ended question, what they perceived as the benefits of profit sharing for their firms. Second, CEOs were asked to indicate their beliefs about the impact of profit sharing on the following thirteen aspects of company performance, on a scale ranging from -5 (extremely negative) to +5 (extremely positive), with "0" indicating no impact: the company overall, employee job satisfaction, employee loyalty, employee motivation and effort, employee interest in firm performance, ability to recruit employees, employee turnover, employee absenteeism, cooperation within the firm, industrial relations, grievance rates, company profitability, value of company stock.

Company Characteristics. "Size" was measured in terms of the number of full-time equivalent employees and total sales revenue in the most recent fiscal year. "Age of firm" was the number of years since the firm had been founded. "Proportion unionized" was the percentage of the total work force who were union members. "Proportion professional" was the percentage of total employment who were professional or technical employees, while "proportion blue collar" was the percentage of total employment who did not hold professional, technical, clerical, or managerial jobs. "Proportion managerial" was the percentage of total employment deemed to be managers or supervisors.

Plan Characteristics. "Bonus form" was measured by two variables. "Cash plan" was a dummy variable indicating whether or not the plan paid

out only in cash (79 firms). "Deferred plan" was a dummy variable indicating whether all proceeds were deposited in a deferred profit-sharing plan (16 firms). "Fixed profit proportion" was a dummy variable indicating whether a pre-specified percentage of profits was used in calculating the amount of the bonus pool (it was at 55% of the firms). "Proportion of profits" was the percentage of profits indicated by firms that utilized fixed percentages (the median percentage was 10%, ranging from 1% to 33%). "Bonus eligibility" was measured by one variable. "All employees eligible" was a dummy variable indicating whether all company employees were eligible to participate in profit sharing, once they met the minimum length of service requirement (all employees were eligible at 39% of the firms).

Four dummy variables indicated whether the bonus allocation was based on salary (31 firms), seniority (14 firms), a combination of these two (18 firms), or on another basis, primarily employee performance (37 firms). "Employees consulted" was a dummy variable indicating whether employees had been consulted in any way regarding the design of the profit-sharing plan (they had been at 43% of the firms). "Profit-sharing consultant" was another dummy variable based on whether the firm had used a specialized profit-sharing consultant in designing their plan (13% of firms).

"Profit-sharing communication" indicates the number of different methods that the firm used for communicating about profit sharing with their employees, and could range from zero to six. Two firms admitted to not communicating about profit sharing at all, most (81 firms) indicated one method, nineteen indicated two methods, four firms indicated three methods, and two firms indicated four methods. "Age of plan" refers to the number of years that profit sharing had been in effect, and ranged from less than one year to 53 years, with a median of 8 years.

Management Philosophy. Ascertaining the respondent's managerial philosophy during a brief telephone interview was a challenge, particularly since established measures for this concept do not exist. It was decided to measure school of thought by tapping into the underlying assumptions of the CEO, as described below:

The following question attempts to help us understand your own philosophy of management. Please indicate whether you agree with the following statements:

In your experience, most people work because:

- a. they are paid to do so
- b. they enjoy the challenge and learning the job provides
- c. they enjoy the opportunity for social contact the job provides.

After rating their agreement with each item on a 1 to 7 scale, each CEO was then asked to rank the three in order of their strength of agreement.

This ranking procedure appeared to work quite well in identifying CEOs with either a classical (item a) or high-involvement philosophy (item b), but very few selected item c. Therefore, two scales were used. If a CEO indicated item a was most reflective of his or her beliefs, he or she was assigned a "1" on the classical scale (38 CEOs), "0" otherwise. If item b was most reflective, the CEO was assigned a "1" on the high-involvement scale (59 CEOs), "0" otherwise.

The means, standard deviations, and intercorrelations for all of the potential moderator variables are shown in Table 1.

RESULTS

Perceived Effects of Profit Sharing

When queried about the benefits of profit sharing (in an open-ended format), the most common advantage mentioned by CEOs was "improved employee motivation and performance" (cited by 52% of respondents). Next, mentioned by 36%, was "increased ability to attract and retain employees." "Improved company performance" and "giving employees a piece of the action" were each cited by 30% of respondents. Finally, "increased employee interest in company performance," and improved teamwork/cooperation were cited by 10% and 9%, respectively.

Table 2 provides the CEOs' ratings of the impact of profit sharing on each of the thirteen profit-sharing success indicators. As can be seen, CEOs were overwhelmingly positive about the impact of profit sharing, with very few indicating any negative effects. Almost all (98%) believed that profit sharing had had a positive effect on the company overall, and over 90% also indicated positive effects on employee interest in company performance, employee motivation and effort, employee loyalty, and job satisfaction. Seventy-five percent or more indicated positive effects on employee turnover, company profitability, cooperation within the firm, and ability to recruit employees. About 60% reported favourable effects on industrial relations and employee absenteeism. There were only two variables for which only a minority of managers perceived positive effects — grievance rates and stock value — and even here very few managers perceived negative effects.

Bivariate Correlations

To assess whether any of the proposed moderators influenced the extent to which these consequences emerged, bivariate correlations between the moderators and the 13 profit-sharing consequences were first computed.

| Bonus Determination | | | | | | | | | | | | | | | | | | | | | | | | |
|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|------|------|------|------|
| 11. Fixed Profit Proportion | .55 | .50 | .04 | -.06 | -.05 | .11 | .15 | -.04 | .08 | .04 | .03 | -.04 | - | | | | | | | | | | | |
| 12. Proportion of Profits | .11 | .69 | .01 | .01 | .06 | -.32 | -.15 | .14 | -.12 | .07 | -.09 | .01 | - | | | | | | | | | | | |
| Bonus Eligibility | | | | | | | | | | | | | | | | | | | | | | | | |
| 13. All Employees Eligible | .39 | .49 | -.01 | -.13 | .07 | -.22 | -.29 | .10 | -.05 | -.04 | -.01 | -.18 | -.04 | -.01 | - | | | | | | | | | |
| Bonus Allocation | | | | | | | | | | | | | | | | | | | | | | | | |
| 14. Based on Salary | .30 | .46 | .09 | .10 | -.11 | .35 | .06 | -.12 | .08 | -.22 | -.33 | .25 | .02 | -.26 | -.05 | - | | | | | | | | |
| 15. Based on Seniority | .13 | .34 | -.05 | .00 | .03 | .03 | .10 | -.25 | .17 | .13 | .17 | -.09 | -.11 | .09 | -.14 | -.26 | - | | | | | | | |
| 16. Based on Combination | .17 | .38 | .08 | -.02 | .14 | .01 | .00 | .00 | -.05 | .17 | .14 | -.12 | -.01 | .03 | .00 | -.29 | -.18 | - | | | | | | |
| 17. Based on Performance | .35 | .48 | -.22 | -.17 | .20 | -.34 | -.14 | .26 | -.12 | -.04 | .12 | -.09 | .01 | .13 | .10 | -.48 | -.29 | -.34 | - | | | | | |
| Other Characteristics | | | | | | | | | | | | | | | | | | | | | | | | |
| 18. Employees Consulted | .33 | .47 | .13 | .17 | -.02 | .06 | -.04 | .08 | -.08 | -.04 | -.28 | .27 | -.01 | -.06 | -.18 | .13 | -.10 | .02 | -.07 | - | | | | |
| 19. Profit-Sharing Consultant | .13 | .34 | .25 | .28 | -.03 | .04 | -.01 | .00 | -.13 | .13 | .14 | .12 | .08 | .06 | -.12 | .12 | -.06 | -.09 | -.09 | .59 | - | | | |
| 20. Profit-Sharing Communication | 1.29 | .66 | .07 | .14 | -.02 | .07 | -.21 | .15 | -.16 | .03 | -.30 | .01 | .01 | .03 | .28 | .24 | -.14 | -.14 | -.07 | .25 | .23 | - | | |
| 21. Age of Profit-Sharing Plan (years) | 12.2 | 12.6 | .18 | .11 | .03 | .16 | .06 | .09 | -.12 | .07 | -.20 | .29 | -.03 | -.07 | -.10 | .01 | -.15 | -.07 | .12 | .08 | -.07 | .12 | - | |
| Managerial Philosophy | | | | | | | | | | | | | | | | | | | | | | | | |
| 22. Classical | .38 | .49 | -.18 | -.18 | -.06 | -.09 | -.15 | -.19 | .13 | -.06 | .09 | -.02 | -.09 | -.05 | -.16 | .05 | .33 | -.07 | -.16 | .01 | .02 | -.20 | -.16 | - |
| 23. High Involvement | .58 | .50 | .20 | .20 | .03 | .10 | .06 | .23 | -.21 | .10 | -.13 | .06 | .14 | -.01 | .18 | .00 | -.29 | .11 | .05 | .00 | .01 | .23 | .07 | -.92 |

Note: Bold coefficients are significant at .01 level, two tailed tests

TABLE 2
CEOs' Ratings of Effects of Profit Sharing

| <i>Perceived impact of Profit Sharing on:</i> | <i>Percent of respondents reporting:</i> | | | <i>Mean impact</i> | <i>Standard error of the mean</i> |
|---|--|----------------------|----------------------------|------------------------|---|
| | <i>Negative impact</i> | <i>No impact</i> | <i>Positive impact</i> | | |
| The company overall | — | 2% | 98% | 3.63 | .12 |
| Interest in company performance | — | 6% | 94% | 3.62 | .14 |
| Employee motivation and effort | — | 3% | 97% | 3.43 | .13 |
| Employee loyalty | — | 6% | 94% | 3.25 | .14 |
| Employee job satisfaction | — | 7% | 93% | 3.02 | .14 |
| Employee turnover | — | 21% | 79% | 2.64 | .18 |
| Company profitability | 3% | 16% | 81% | 2.58 | .21 |
| Cooperation within firm | 1% | 15% | 84% | 2.56 | .20 |
| Ability to recruit employees | 1% | 24% | 75% | 2.08 | .19 |
| Industrial relations | 6% | 33% | 61% | 1.91 | .28 |
| Employee absenteeism | 1% | 37% | 62% | 1.75 | .19 |
| Grievance rates | 4% | 51% | 45% | 1.38 | .29 |
| Value of company stock | 7% | 48% | 45% | 1.23 | .29 |

Note: An eleven point scale was used for collecting this information, with potential scores for each consequence ranging from -5 (very negative) to +5 (very positive), with "zero" indicating "no effect". For the purposes of presentation in this table, these ratings have been collapsed into three categories, but the means are based on the eleven point scales.

Of the resulting 299 coefficients, 72 were significant at the .05 level or better, as can be seen from Table 3. The single variable most often associated with profit-sharing consequences was classical management philosophy, which was significantly negatively associated with eight indicators of profit-sharing success. Consistent with expectations, all coefficients for classical philosophy had negative signs, while all coefficients for the high involvement managerial philosophy had positive signs, six of which were significantly positive.

Two profit-sharing plan characteristics were also significantly associated with numerous profit-sharing consequences — bonus allocation (the four allocation variables were collectively related to eleven indicators), and profit-sharing communication (which was significantly related to seven indicators). The proportion of company profits allocated to profit sharing was positively related to three success indicators, as were profit-sharing plans in which all employees were eligible for profit sharing. Bonus form was significantly related to two success indicators, as was the use of

TABLE 3
Bivariate Correlations between Moderator Variables and Profit Sharing Consequences

| | Company Overall | Employee Interest | Motivation | Loyalty | Job Satisfaction | Turnover | Profitability | Cooperation | Recruitment | Industrial Relations | Absenteeism | Grievances | Stock Value |
|---------------------------------------|-----------------|-------------------|------------|---------|------------------|----------|---------------|-------------|-------------|----------------------|-------------|------------|-------------|
| Company Characteristics | | | | | | | | | | | | | |
| <i>Size of Firm</i> | | | | | | | | | | | | | |
| Number of Employees | .11 | .07 | -.01 | .12 | -.02 | .12 | -.03 | .24* | .12 | .16 | .12 | .08 | .01 |
| Gross Sales | .05 | .11 | .02 | .10 | -.12 | .12 | -.07 | .20* | .18* | .10 | .02 | .05 | -.04 |
| <i>Industry Type</i> | | | | | | | | | | | | | |
| Service Sector | -.07 | -.21 | -.03 | -.08 | .10 | .08 | -.02 | -.25* | .06 | -.28* | .03 | -.20 | .08 |
| <i>Firm Age</i> | | | | | | | | | | | | | |
| Age of Firm in Years | -.03 | -.10 | -.14 | -.20* | -.10 | -.18 | .16 | -.12 | -.15 | -.13 | -.26* | -.03 | -.12 |
| <i>Nature of Work Force</i> | | | | | | | | | | | | | |
| Proportion Unionized | -.07 | .09 | -.09 | -.15 | .02 | .14 | -.09 | .23* | -.12 | .25* | .13 | .33* | .15 |
| Proportion Professional | .03 | .04 | .14 | .25** | .06 | .07 | .05 | .25** | .29* | -.14 | -.04 | .31* | -.05 |
| Proportion Blue Collar | -.03 | .01 | -.13 | -.23* | .01 | -.03 | -.03 | .09 | .32** | .21 | .08 | .40** | .18 |
| Proportion Managerial | -.04 | -.07 | -.07 | -.07 | .01 | -.05 | .04 | -.14 | .06 | -.23 | -.08 | -.27* | -.07 |
| Profit-Sharing Characteristics | | | | | | | | | | | | | |
| <i>Bonus Form</i> | | | | | | | | | | | | | |
| Cash Plan | -.14 | .04 | -.04 | -.08 | .09 | -.01 | .07 | -.07 | .01 | -.05 | .11 | -.02 | -.05 |
| Deferred Plan | -.02 | -.22* | -.12 | -.04 | -.12 | -.14 | -.10 | -.09 | -.13 | -.21 | -.23* | -.18 | .07 |
| <i>Bonus Determination</i> | | | | | | | | | | | | | |
| Fixed Profit Proportion | .14 | .06 | .05 | .10 | .08 | .04 | .04 | -.01 | -.07 | .25* | .12 | .19 | .01 |
| Proportion of Profits | .29* | .23 | .02 | .31* | .19 | .26* | -.04 | -.14 | .20 | -.18 | .17 | .00 | .06 |
| <i>Bonus Eligibility</i> | | | | | | | | | | | | | |
| All Employees Eligible | .26** | .17* | .20* | .12 | .03 | -.02 | .11 | .15 | .07 | .07 | .15 | -.01 | .08 |
| <i>Bonus Allocation</i> | | | | | | | | | | | | | |
| Based on Salary | -.14 | -.21* | -.24** | -.27** | -.38*** | -.28** | -.08 | -.09 | -.08 | .10 | -.31** | .11 | -.12 |
| Based on Seniority | -.24** | -.18* | -.24** | -.19* | -.11 | .01 | -.16 | -.12 | -.19* | -.29* | .10 | -.27* | -.21 |
| Based on Combination | -.02 | .07 | -.04 | -.03 | -.02 | -.03 | -.01 | .09 | .25** | .01 | .10 | .00 | -.04 |
| Based on Performance | .28** | .19* | .44*** | .39*** | .45*** | .26* | .15 | .03 | .00 | .13 | .13 | .08 | .31* |
| <i>Other Characteristics</i> | | | | | | | | | | | | | |
| Employees Consulted | -.04 | -.11 | -.07 | -.03 | .03 | -.01 | -.07 | -.07 | .26* | -.18 | -.02 | -.20 | .10 |
| Profit-Sharing Consultant | .20* | .06 | .04 | .15 | -.13 | -.11 | .01 | -.04 | .18 | .31* | -.08 | .21 | -.04 |
| <i>Communication</i> | | | | | | | | | | | | | |
| Age of Profit-Sharing Plan | .04 | .00 | .23* | .27** | .05 | .15 | .12 | .20* | .20* | .29* | .06 | .15 | .06 |
| <i>Managerial Philosophy</i> | | | | | | | | | | | | | |
| Classical | | | | | | | | | | | | | |
| High Involvement | -.27** | -.26** | -.18* | -.16 | -.15 | -.30** | -.25** | -.18 | -.25* | -.20 | -.23* | -.19 | -.56** |
| | .24** | .20* | .14 | .14 | .09 | .22 | .19 | .16 | .21* | .14 | .14 | .09 | .39** |

Note: *p < .05, **p < .01, ***p < .001, one tailed.

a profit-sharing consultant in profit-sharing plan design. The remaining three plan characteristics (fixed profit proportion, employee consultation in plan design, and age of the plan) were each significantly associated with one success indicator.

Turning to company characteristics, the nature of the work force was the most important variable, being significantly associated with five profit-sharing success indicators. Company size was positively associated with two success indicators, while firm age was negatively associated with two. Industry type was associated with two success indicators, as firms in the service sector were less likely to report improvements in cooperation or industrial relations than those in the manufacturing sector.

Multiple Regression Results

Overall, every profit-sharing success indicator had some significant correlates, ranging from two (for job satisfaction and profitability) to nine (for recruitment). In order to determine how much of the variance in each success indicator is explained by the variables included in this study, multiple regression analysis is necessary. Multiple regression has the advantage of helping to sort out the independent amount of variance each explanatory variable contributes, and also of dealing with variables which are highly intercorrelated, by removing the weaker intercorrelated variables from the equation, leaving only those with the strongest contribution to variance. The method used to do this was ordinary least squares (OLS) regression, which produces interpretable estimates (the "beta weights") of the independent amount of variance explained by each independent variable for each dependent variable. OLS regression can be used because the dependent variables are measured by eleven point rating scales which assume equal intervals between points on the scales.

Each of the resulting thirteen regression equations were structured in the same way. That is, all of the explanatory (moderator) variables were entered stepwise into each regression equation, with a minimum criterion for inclusion being a significance level of .05 (one tailed). Table 4 shows the results of this procedure (including only variables which had significant beta weights). As can be seen, the moderator variables predicted a significant ($p < .01$) amount of the variance in each of the thirteen indicators, varying from 5.3% for profitability to 37.2% for stock value. Each success indicator had from one to four significant predictors. Three profit-sharing success indicators (job satisfaction, profitability, and grievances) had just one significant predictor, while two indicators (employee interest, recruitment) had four significant predictors.

TABLE 4
Multiple Regression Results for Each Consequence of Profit Sharing

| <i>Perceived effect of profit sharing on:</i> | <i>R</i> | <i>R</i> ² | <i>Moderator Variable</i> | <i>Beta</i> | <i>Sig.</i> |
|---|---------------|-----------------------|---------------------------------|-------------|-------------|
| Company Overall | .42 (.001) | 15.0% | Allocation Based on Performance | .26 | .004 |
| | | | Profit-Sharing Communication | .22 | .013 |
| | | | Classical Management | -.19 | .031 |
| Employee Interest | .51 (.01) | 22.6% | Profit-Sharing Communication | .32 | .001 |
| | | | Allocation Based on Salary | -.30 | .001 |
| | | | Service Sector | -.25 | .004 |
| | | | Classical Management | -.20 | .021 |
| Employee Motivation | .51 (.001) | 24.2% | Allocation Based on Performance | .45 | .001 |
| | | | Profit-Sharing Communication | .26 | .003 |
| Employee Loyalty | .49 (.001) | 22.6% | Allocation Based on Performance | .41 | .001 |
| | | | Profit-Sharing Communication | .30 | .001 |
| Employee Satisfaction | .45 (.001) | 20.3% | Allocation Based on Performance | .45 | .001 |
| Employee Turnover | .40 (.01) | 13.9% | Classical Management | -.29 | .003 |
| | | | Allocation Based on Salary | -.26 | .005 |
| Company Profitability | .25 (.01) | 5.3% | Classical Management | -.25 | .005 |
| Cooperation | .39 (.001) | 11.7% | Proportion Unionized | .25 | .012 |
| | | | Profit-Sharing Communication | .24 | .014 |
| | | | Number of Employees | .19 | .038 |
| Recruitment | .53 (.001) | 26.7% | Proportion Blue Collar | -.31 | .004 |
| | | | Employees Consulted | .31 | .004 |
| | | | Classical Management | -.26 | .010 |
| | | | Allocation Based on Combination | .19 | .046 |
| Industrial Relations | .50 (.001) | 20.5% | Profit-Sharing Communication | .34 | .006 |
| | | | Proportion Unionized | .31 | .009 |
| | | | Service Sector | -.25 | .025 |
| Absenteeism | .36 (.01) | 10.5% | Allocation Based on Salary | -.28 | .007 |
| | | | Classical Management | -.22 | .026 |
| Grievances | .51 (.001) | 25.1% | Proportion Blue Collar | .51 | .001 |
| Stock Value | .65 (.001) | 37.2% | Classical Management | -.45 | .001 |
| | | | Age of Plan | .28 | .024 |
| | | | Allocation Based on Performance | .23 | .045 |

Note: Significance levels are one tailed. Adjusted R^2 is used.

Table 5 summarizes the significant predictors of profit-sharing success. The four most important predictors were bonus allocation method (which was significantly related to nine indicators), managerial philosophy

TABLE 5
Summary of Significant Predictors of Profit Sharing Consequences

| | Company Overall | Employee Interest | Motivation | Loyalty | Job Satis- faction | Turnover | Profit- ability | Coopera- tion | Recruit- ment | Industrial Relations | Absentee- ism | Grievances | Stock Value |
|------------------------------|--------------------|----------------------|------------|---------|-----------------------|----------|--------------------|------------------|------------------|-------------------------|------------------|------------|----------------|
| Bonus Allocation | * | * | * | * | * | * | * | * | * | * | * | * | * |
| Managerial Philosophy | * | * | | | | * | * | | * | | * | | * |
| Profit-Sharing Communication | * | * | * | * | | | | * | | * | | | |
| Nature of Work Force | | | | | | | | * | * | * | | * | |
| Industry Type | | * | | | | | | | | * | | | |
| Employees Consulted | | | | | | | | | * | | | | |
| Age of Profit-Sharing Plan | | | | | | | | | | | | | * |
| Firm Size | | | | | | | | * | | | | | |
| Bonus Form | | | | | | | | | | | | | |
| Bonus Determination | | | | | | | | | | | | | |
| Bonus Eligibility | | | | | | | | | | | | | |
| Firm Age | | | | | | | | | | | | | |

Note: Stars in the columns represent variables with significant beta weights (from the multiple regressions in Table 4).

(related to seven indicators), profit-sharing communication (related to six indicators), and nature of the work force (related to four indicators). Industry type was related to two indicators, while employee consultation in plan design, age of the plan, and firm size were related to one each. Three profit-sharing plan characteristics (bonus form, bonus determination, bonus eligibility) and one company characteristic (firm age) had no significant relationship to any success indicator.

DISCUSSION AND CONCLUSIONS

The results of this study provide either direct or indirect support for all seven of the theoretical paths identified earlier in the paper. Virtually all of the consequences posited in the literature did appear to emerge, at least in the eyes of chief executives of profit-sharing firms. This supports the notion that profit sharing can be highly beneficial for an organization even if it has little or no direct effect on employee motivation and effort. It also implies that narrow theoretical conceptualizations of profit-sharing effects will be seriously deficient, and that any theoretical framework that tries to capture the full effects of profit sharing needs to be comprehensive and multi-faceted.

Three factors seemed to strongly moderate profit-sharing consequences—managerial philosophy, profit-sharing communication, and bonus allocation method. Results support our expectation that profit-sharing plans will be much less successful in classical firms, as classical management diminished the positive impact of profit sharing on no less than seven indicators. This is in line with both theory (Weitzman and Kruse 1990; Jones and Pliskin 1991; Long 1998) and previous empirical evidence (Cable and Fitzroy 1980; Kim 1998). It is also in line with research suggesting that various human resource practices produce substantial effects only when packaged into mutually reinforcing “bundles” of practices. For example, MacDuffie (1995) found that contingent reward systems, such as profit sharing, fit best with a team-oriented, high commitment work place, similar to what Lawler (1992) would characterize as a “high involvement” work place. However, it should also be noted that in our sample profit sharing was not deemed to be unsuccessful in classical firms; just less successful than when applied to high involvement firms. This is a bit of a surprise, but does correspond with other studies indicating that profit sharing seldom has negative effects (Weitzman and Kruse 1990).

It is no surprise at all that communication about profit sharing increases the impact of profit sharing, as virtually all profit-sharing literature emphasizes this point. However, the impact of the bonus allocation method was stronger than expected. Bonus allocations based on individual

employee performance significantly enhanced profit-sharing success, while bonuses based on salary did the reverse. Salary-based allocation diminished the impact of profit sharing on employee turnover, absenteeism, and interest in company performance. This is in line with the suggestion earlier in the paper that salary-based payout allocation might be seen as the least equitable payout method, and theoretical path 3 suggested that perceived reward inequity could lead to increased turnover and absenteeism. The results here are consistent with these arguments.

Performance-based bonus allocation had a positive impact on motivation, loyalty, satisfaction, stock value, and overall company performance. This suggests that performance-based payout allocation may indeed play a major role in preventing free riding, and also may be seen as equitable, increasing reward satisfaction and, in turn contributing to increased general satisfaction, consistent with theoretical paths 1, 3 and 5.

While these findings are consistent with expectations, some findings are surprising. Several profit-sharing plan characteristics thought to be important appeared to have little or no effect on the perceived consequences of profit sharing, including bonus form (cash vs. deferred), the bonus determination formula, and bonus eligibility. Cash plans are thought to have a greater impact on employee behaviour than deferred plans, but there was little evidence of this here, unlike in Kruse's (1993) U.S. sample. One possibility is that there is insufficient variance in our Canadian sample, since most Canadian firms (unlike those in the U.S.) use cash-based profit sharing. In the current sample, only 15% of firms did not include at least some cash in their bonus payouts.

Reduced variance due to restriction of range may also help to explain the lack of impact of bonus eligibility, since firms were excluded from the sample if they did not have broad-based profit-sharing plans (although inclusion of all employees was not required for inclusion in this study). However, no such explanation would apply to bonus determination, where the sample split fairly evenly, with just over half (55%) basing the profit-sharing bonus on a pre-determined proportion of profits. Failing to do so did not seem to have any negative consequences, despite expectations to the contrary. This finding is in line, however, with Kruse's (1993) finding that discretionary formula plans are not less effective than fixed-formula plans (he actually found the reverse).

Other plan characteristics that seemed to have little impact were age of the plan, employee consultation in plan design, and use of a profit-sharing consultant. It is not surprising that use of profit-sharing consultants had no noticeable effect, since relatively few firms used them in this study, but the limited effect of employee consultation in the design process is more surprising. It may be that the effects of employee consultation wash out

over time, or that the employee consultation process was not generally carried out effectively. It should be recalled, however, that employee consultation did seem to produce a profit-sharing plan that was more attractive to potential employees, since profit sharing was perceived as a more useful aid to recruitment in firms where employees had been consulted on its design. Finally, it is quite surprising that plan age had such a limited effect on profit-sharing success (although plan age was positively related to stock value). It might have been expected that plans in effect for a longer period would have generated more positive results, but this did not generally happen. Perhaps the major effects of profit sharing occur relatively soon after implementation, and simply maintain themselves over time, consistent with what Kruse (1993) found in his longitudinal study.

Turning to company characteristics, the nature of the work force appeared to influence four consequences of profit sharing. The proportion of employees unionized was related positively to improvements in industrial relations and employee cooperation, and negatively to none of the profit-sharing consequences. Thus, it seems that in this Canadian sample profit sharing can be just as successful in unionized firms as nonunion firms, contrary to what Cooke (1994) found in his U.S. study. However, this is not necessarily to say that profit sharing will be successful in all unionized firms; it may well be that the unionized firms in our sample that implemented profit sharing were self selected in terms of suitability for effective profit sharing. For example, there was no significant difference between nonunion and unionized firms in their managerial philosophies in the current sample.

One other work force characteristic was also relevant. In firms with a higher proportion of blue-collar workers, profit sharing had a more positive impact on grievances, but a less positive impact on recruitment. Since there are likely more formal grievances in blue collar work places (which are more likely to be unionized than white collar workplaces), it is not surprising that firms with more blue-collar workers would see a stronger impact of profit sharing on grievance reduction than in other firms. In regard to recruitment, it appears that top executives believe that profit sharing will be regarded as a more attractive hiring inducement by white-collar employees than by blue-collar employees.

Several other company characteristics are worth noting. Although firms not in the service sector experienced greater improvements in employee cooperation and industrial relations than did firms in the service sector, industry type appeared to have relatively little impact overall. Firm age, in and of itself, also appeared to have very little effect on the results. It had been expected that the older firms would have more classical management than newer firms (and thus be less suited for profit sharing), but they did not, so this result is not surprising when seen in that light.

Finally, firm size had very little impact on the effects of profit sharing, and in the one case that it did (for cooperation), it was *positively* related to effectiveness. This result suggests first, that profit sharing can be equally successful in large or small firms and, second, that individual effort (path 1) may not be an important path for profit-sharing success. If individual effort is in fact an important route for profit-sharing success, profit sharing should be less successful in large firms, due to the "1/N problem." The fact that profit sharing is not less successful in larger firms supports the argument that other paths to organizational performance may be much more important than the "individual effort" path, a path about which critics of profit sharing have always been skeptical.

Although the findings of this study need to be corroborated by further research before any definitive conclusions can be drawn, these results do suggest some answers to the puzzle of why and how profit sharing increases company productivity, but not for all firms. These findings have implications for theoreticians, researchers, and practitioners. For theoreticians, the results suggest that any effective theoretical model of the effects of profit sharing needs to be complex and multi-faceted. For researchers, there is a need for empirical examination and verification of the possible paths connecting profit sharing and organizational consequences that have been identified here. For the practitioner, profit sharing appears to be a good bet as long as (a) you are not a classical organization, (b) you communicate extensively about your profit-sharing plan, and (c) you allocate your profit-sharing bonus payouts according to some fair measure of individual employee performance.

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RÉSUMÉ

Le partage des profits: impact et facteurs modérateurs

Il existe en général suffisamment de preuve à l'effet que le partage des profits avec les employés se traduit par une amélioration des résultats d'une entreprise. Cependant, on connaît très peu les conditions de cette relation, de même que les mécanismes qui la permettent. En s'appuyant sur la théorie et sur une recherche empirique précédente, cette étude révèle l'impact et les facteurs modérateurs des régimes de partage des profits et se sert des données tirées de 108 entreprises canadiennes qui ont un tel régime pour procéder à une vérification d'ordre empirique.

Sept avenues d'ordre théorique reliant ces régimes à diverses conséquences au plan organisationnel sont répertoriées. Une première avenue laisse croire que le partage des profits peut accroître l'effort d'un salarié en accentuant les liens entre la rémunération et la performance. Une deuxième suggère que le partage des profits rend l'enveloppe de la rémunération beaucoup plus attrayante, ce qui peut faciliter à la fois le recrutement et la réduction du roulement de l'effectif. Une troisième soutient qu'un tel régime favorise une perception de la rémunération sous un aspect plus équitable; en ce faisant, on évite ainsi les problèmes associés à l'inéquité de la rémunération, tels que l'absentéisme, le roulement et une performance diminuée de la part des salariés. Une quatrième avenue suggère que le partage des profits engendre une plus grande identification à l'organisation, ce qui se traduit par des comportements qui indiquent une sorte de « citoyenneté organisationnelle ». Une cinquième prétend qu'un tel régime peut mener à un effort plus grand de collaboration entre la direction et ses salariés et entre les salariés eux-mêmes. Une sixième soutient qu'une réduction des conflits et une coopération associées à un accroissement de la satisfaction à l'endroit de la rémunération devraient se traduire par une augmentation de la satisfaction au travail. Cette dernière aurait des effets bénéfiques sur le roulement, l'absentéisme et le nombre de griefs. Enfin, une dernière avenue nous incite à penser que le partage des profits peut

accroître l'intérêt que les salariés démontrent à l'endroit des résultats d'une entreprise, tout en les invitant à communiquer à la direction leurs idées sur des économies possibles.

Cependant, on soutient également qu'un certain nombre de facteurs peuvent freiner l'apparition des effets que nous venons d'identifier. Ces facteurs modérateurs sont de l'ordre des caractéristiques d'une entreprise, des caractéristiques des régimes de partage des profits eux-mêmes et de la philosophie dominante de la direction. Afin de vérifier dans quelle mesure ces conséquences se produisent, de même que la présence de facteurs qui tempèrent leur apparition, on a effectué des entrevues avec les membres de la haute-direction de 108 entreprises canadiennes qui utilisent un régime de partage des profits. Au cours de ces entrevues, on a recueilli de l'information sur les caractéristiques des entreprises, les régimes de partage de profits et la nature de la philosophie managériale. Également, on a obtenu des données sur la perception que se font les présidents-directeurs généraux des effets des régimes sur les treize aspects suivants: l'intérêt des salariés à l'endroit de la performance de l'entreprise, leur effort et leur motivation, leur loyauté, le roulement, l'absentéisme, la satisfaction au travail, la collaboration, le nombre de griefs, les relations du travail, la facilité ou non à recruter des personnes, la profitabilité de l'entreprise, la valeur de l'action en bourse et, enfin, l'entreprise en général.

Dans l'ensemble, on constate que ces présidents et directeurs généraux perçoivent le partage des profits comme ayant un effet favorable sur chacun des aspects énumérés plus haut, sauf le taux de griefs et la valeur des actions. La moitié des répondants ne voient aucun impact sur ces derniers aspects et moins que la moitié y voient un effet positif. Cependant, on découvre que trois facteurs modèrent fortement l'émergence de ces conséquences. En ligne avec les attentes sur le sujet, les régimes connaissent moins de succès dans les entreprises dont la direction partage une philosophie managériale conventionnelle ou classique, dont l'un des ingrédients consiste à croire que les salariés ne sont motivés que par l'argent. Toujours en ligne avec les attentes, ces régimes connaissent un plus grand succès dans les entreprises où l'on diffuse une complète information sur la nature du régime en vigueur et les circonstances d'ordre financier qui affectent l'entreprise. Enfin, on considère que ces régimes connaissent plus de succès dans les entreprises où les bonis provenant du partage sont calculés en se basant sur une mesure de la performance individuelle des salariés.